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CONFIRMATION NO. ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 03/24/2004 David M. Pepper B-4856 620360-6 6678 10/809,237 **EXAMINER** 7590 12/01/2005 Richard P. Berg, ESQ. MILLER, ROSE MARY c/o LADAS & PARRY ART UNIT PAPER NUMBER **Suite 2100** 5670 Wilshire Boulevard 2856

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		AV
	Application No.	Applicant(s)
	10/809,237	PEPPER ET AL.
Office Action Summary	Examiner	Art Unit
	Rose M. Miller	2856
The MAILING DATE of this communicated Period for Reply	ation appears on the cover sheet wi	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNIC.  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commun.  If the period for reply specified above is less than thirty (30) of the period for reply is specified above, the maximum statut.  Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	ATION.  37 CFR 1.136(a). In no event, however, may a recitation.  days, a reply within the statutory minimum of thirt tory period will apply and will expire SIX (6) MON I, by statute, cause the application to become AB	eply be timely filed  (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed	on <u>15 September 2005 and 03 Oc</u>	<u>tober 2005</u> .
2a)⊠ This action is <b>FINAL</b> . 2b	) This action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice	under <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.
Disposition of Claims		
4) Claim(s) 1-50 is/are pending in the app	olication.	
4a) Of the above claim(s) is/are	withdrawn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-50</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction	on and/or election requirement.	
Application Papers		
9) The specification is objected to by the I		
10) $\boxtimes$ The drawing(s) filed on <u>03 October 2005</u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11)☐ The oath or declaration is objected to b	by the Examiner. Note the attached	Office Action of form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim fo a) All b) Some * c) None of:  1. Certified copies of the priority do 2. Certified copies of the priority do 3. Copies of the certified copies of application from the Internationa	ocuments have been received. cuments have been received in A the priority documents have been	pplication No
* See the attached detailed Office action  Attachment(s)  1) Notice of References Cited (PTO-892)	4) ☐ Interview S	ummary (PTO-413)
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTC</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PT</li> </ul>	rO/SB/08) 5) Notice of Ir	)/Mail Date formal Patent Application (PTO-152)
Paper No(s)/Mail Date	6) 🔲 Other:	

#### **DETAILED ACTION**

Page 2

## Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 10, 11, 12, 13, 23, 24, 25, 26, 36, 37, 38, 39, 47, 48, 49, and 50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 60, 60, 69, 70, 60, 60, 69, 70, 60, 60, 69, 70, 51, 51, 58, 54, respectively, of copending Application No. 10/966,698. Although the conflicting claims are not identical, they are not patentably distinct from each other because the use of multiple exciters, one for each of the plurality of vibrometers arrayed, would have been obvious as the multiplication of an element for a multiplied effect (in this case the speed up of the testing of the object) is well known in the art of measuring and testing. Therefore, it would have been obvious to one of ordinary skill in the art to include an exciter for each vibrometer in order to allow for faster testing and better control over the test apparatus.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2856

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Page 3

5. Claims 1-8, 14-19, 21, 27-34, and 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorraine et al. (US 5,801,312) in view of Beffy et al. (US 5,513,532).

Lorraine et al. discloses an ultrasonic imaging system comprising: an exciter disposed to impinge at least one exciter beam (source laser 12) onto a remote mass (14) to excite the mass; an optical probe (detector laser 16) disposed to impinge at least one optical beam onto a vibrating surface of the excited mass (14) to be reflected thereby; a laser vibrometers (detector 18) disposed to detect at least part of the optical beam reflected by the vibrating surface of the excited mass (14) and configured to generate signals indicative of the surface vibrations (signal capture 20); a processor (20) configured to store (memory 24) the signals generated by the laser vibrometer (18).

With regards to claims 1, 2, 14, 27, 28, 40 and 41, **Lorraine et al.** discloses the claimed invention with the exception of the processor being configured to reverse the signals generated by the laser vibrometer and the system including a modulator configured to modulate the at least one exciter beam generated by the exciter in accordance with the reversed signals.

**Beffy et al.** teaches inverting or time-reversing signals received from a test object and modulating an emitter in accordance with the reversed signals in order to improve the detection of defects within the test object.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of **Lorraine et al.** with a processor which both stores and reverses the signals received from the vibrometer and a modulator for modulating the exciter beam in accordance with the reversed signals as taught by **Beffy et al.** in order to improve the test results and provide a more accurate indication of flaws within the test object.

With regards to claims 3, 15, 29, and 42, **Lorraine et al.** fails to teach the processor being configured to store the signals as a series of pulses and to reverse the stored pulses in a

Art Unit: 2856

first in, last out (FILO) sequence. **Beffy et al.** teaches at column 4 lines 35-44 utilizing a sampler, an analog-digital converter, and a LIFO (last in first out) type memory for storing and reversing the measured signals. It is inherent in the use of a sampler and an analog-digital converter to produce signal pulses from a continuous analog signal. Therefore, as a LIFO memory is a functional equivalent of a FILO memory, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Lorraine et al.** to include the storage of the signals as a series of pulses and to reverse the stored pulses in a first in, last out (FILO) sequence in order to reverse the signals as such is taught by **Beffy et al.** in order to improve the test output.

With regards to claims 4, 16, and 30, **Lorraine et al.** fails to disclose the use of a cache memory to store the signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a cache memory for the storage of the signals as cache memories are well known and well utilized throughout the art of measuring and testing when signal storage is needed. Therefore, one of ordinary skill in the art would select the best type of memory, including a cache memory, which meets the requirements of the system while maintaining the level of cost selected for the invention.

With regards to claims 5, 17, 31, and 43, **Lorraine et al.** fails to disclose a programmable delay line network. **Beffy et al.** teaches utilizing a transducer array to test the object under test. It is well known throughout the art of ultrasonic measuring and testing to utilize a programmable delay line network in order to either focus the transmitted wave by delaying application of the transmission signal to each individual transducer or by delaying the signals received by each individual transducer so that signals from a single location can be added together. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of **Lorraine et al.** with a programmable delay line network in order to focus the ultrasonic waves, either during transmission or after reception, at a particular location within the test object.

With regards to claims 6, 18, and 32, **Lorraine et al.** fails to disclose the use of a cache memory to store the signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a cache memory for the storage of the signals as cache memories are well known and well utilized throughout the art of measuring and testing when signal storage is needed. Therefore, one of ordinary skill in the art would select the best type of

memory, including a cache memory, which meets the requirements of the system while maintaining the level of cost selected for the invention.

With regards to claims 7, 19, 33, and 44, **Lorraine et al.** fails to disclose the use of a pulsed laser source for impinging onto the remote mass to excite the mass. Pulsed lasers are well known in the art of ultrasonic measuring and testing for exciting a mass or object with a particular frequency. This is partly controlled by controlling the pulse frequency of the laser. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a pulsed laser source for the laser source disclosed in the system of **Lorraine et al.** as such allows for greater control of the frequency and characteristics of the vibrations produced within the excited mass/object.

With regards to claims 8, 21, 34, and 45, **Lorraine et al.** fails to disclose the vibrometer being a compensated laser vibrometer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of **Lorraine et al.** with a compensated laser vibrometer as such are well known throughout the art of ultrasonic measuring and testing for providing a more accurate test result or image by reducing the error signals within the system.

6. Claims 1-9, 14-22, 27-35, and 40-46 are rejected under 35 U.S.C. 103(a) as being obvious over Pepper et al. (US 6,657,732 B2) in view of Beffy et al. and Fink (US 5,092,336).

The applied reference, **Pepper et al.**, has at lest one common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Pepper et al. discloses an vibrometer system comprising: an exciter disposed to impinge at least one exciter beam (see column 3 lines 47-65 where the use of both acoustic and laser exciters are disclosed) onto a remote mass (6) to excite the mass; an optical probe (see Figures) disposed to impinge at least one optical beam onto a vibrating surface of the excited mass (6) to be reflected thereby; a laser vibrometers (see Figures) disposed to detect at least part of the optical beam reflected by the vibrating surface of the excited mass (6) and configured to generate signals indicative of the surface vibrations (see Figures).

With regards to claims 1, 2, 14, 27, 28, 40 and 41, **Pepper et al.** discloses the claimed invention with the exception of a processor configured to store and reverse the signals generated by the laser vibrometer and a modulator configured to modulate the at least one exciter beam generated by the exciter in accordance with the reversed signals.

Beffy et al. teaches inverting or time-reversing signals received from a test object and modulating an emitter in accordance with the reversed signals in order to improve the detection of defects within the test object. This can be performed either by the memory circuit disclosed or a solid-state component such as a processor (see column 7 lines 29-48 of Fink et al.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of **Pepper et al.** with a processor which both stores and reverses the signals received from the vibrometer and a modulator for modulating the exciter beam in accordance with the reversed signals as taught by **Beffy et al.** in order determine more accurately an indication of flaws within the test object under test.

With regards to claims 3, 15, 29, and 42, **Pepper et al.** fails to teach the processor being configured to store the signals as a series of pulses and to reverse the stored pulses in a first in, last out (FILO) sequence. **Beffy et al.** teaches at column 4 lines 35-44 utilizing a sampler, an analog-digital converter, and a LIFO (last in first out) type memory for storing and reversing the measured signals. It is inherent in the use of a sampler and an analog-digital converter to produce signal pulses from a continuous analog signal. Therefore, as a LIFO memory is a functional equivalent of a FILO memory, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Pepper et al.** to include the storage of the signals as a series of pulses and to reverse the stored pulses in a first in, last out (FILO) sequence in order to reverse the signals as such is taught by **Beffy et al.** in order to improve the detection of a flaw within the test object.

Art Unit: 2856

With regards to claims 4, 16, and 30, **Pepper et al.** fails to disclose the use of a cache memory to store the signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a cache memory for the storage of the signals as cache memories are well known and well utilized throughout the art of measuring and testing when signal storage is needed. Therefore, one of ordinary skill in the art would select the best type of memory, including a cache memory, which meets the requirements of the system while maintaining the level of cost selected for the invention.

With regards to claims 5, 17, 31, and 43, Pepper et al. fails to disclose a programmable delay line network. Beffy et al. teaches utilizing a transducer array to test the object under test. It is well known throughout the art of ultrasonic measuring and testing to utilize a programmable delay line network in order to either focus the transmitted wave by delaying application of the transmission signal to each individual transducer or by delaying the signals received by each individual transducer so that signals from a single location can be added together. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of Pepper et al. with a programmable delay line network in order to focus the ultrasonic waves, either during transmission or after reception, at a particular location within the test object.

With regards to claims 6, 18, and 32, **Pepper et al.** fails to disclose the use of a cache memory to store the signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a cache memory for the storage of the signals as cache memories are well known and well utilized throughout the art of measuring and testing when signal storage is needed. Therefore, one of ordinary skill in the art would select the best type of memory, including a cache memory, which meets the requirements of the system while maintaining the level of cost selected for the invention.

With regards to claims 7, 19, 33, and 44, **Pepper et al.** discloses the use of a pulsed laser source for impinging onto the remote mass to excite the mass (see column 3 lines 47-65).

With regards to claims 8, 21, 34, and 45, **Pepper et al.** discloses the vibrometer being a compensated laser vibrometer in Figure 7.

With regards to claims 9, 20, 22, 35, and 46, **Pepper et al.** discloses an adaptive photodetector for detecting a plurality of speckles from the optical beam reflected by the vibrating surface of the excited mass (see column 2 lines 19-54).

Art Unit: 2856

#### Terminal Disclaimer

7. The terminal disclaimer filed on 15 September 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent 6,657,732 has been reviewed and is accepted. The terminal disclaimer has been recorded.

# Response to Arguments

8. Applicant's arguments filed 15 September 2005 and 03 October 2005 have been fully considered but they are not persuasive.

Applicant's arguments regarding the Double Patenting Rejection have been read but are not persuasive. The Double Patenting rejection has been made final as the Terminal Disclaimer filed is directed towards commonly owned US 6,657,732 instead of application 10/966,698 (now US Patent 6,973,830) as utilized in the Double Patenting rejections. Therefore, until a Terminal Disclaimer is filed disclaiming the remaining beyond that of US Patent 6,973,930, the Double Patenting rejection remains in effect.

9. With regards to the 103 rejection of claims 1-8, 14-19, 21, 27-34, and 40-45 applicant argues the following:

"Claims 1-8, 14-19, 21, 27-34, and 40-45 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,801,312 to Lorraine et al. in view of U.S. Pat. No. 5,543,532 to Beffy et al. In particular, the Examiner finds that Lorraine discloses all claimed elements of claims 1, 2, 14, 27, 28, 40, and 41, with the exception of a processor configured to store and reverse the signals generated by the laser vibrometer, and a modulator configured to modulate the at least one exciter beam generated by the exciter in accordance with the reversed signals. The Examiner further finds that Beffy teaches inverting or time-reversing signals received from a test object and modulating an emitter in accordance with the reversed signals in order to improve the detection of defects within the test object. The Examiner finally opines that it would have been obvious to the skilled person to provide the system of Lorraine with a processor which both stores and reverses the signals received from the vibrometer and a modulator for modulating the exciter beam in accordance with the reversed signals as taught by Beffy in order to improve the test results and provide a more accurate indication of flaws within the test object.

Applicants respectfully submit that the Examiner's holding of obviousness does not satisfy the minimum requirements set forth in the Rules and clearly enunciated in the MPEP. "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." MPEP § 2142. The Examiner has not set forth such motivation in either of the cited

Page 8

Art Unit: 2856

references nor has she invoked the general knowledge of those skilled in the art. Rather, the Examiner has merely stated the benefit conferred by the invention, which is not setting forth the required showing of motivation but rather merely applying the benefit of hindsight to its fullest in combining different references with the benefit of the invention itself as an explicit roadmap.

Applicants wish to note that they do not agree with the Examiner that the combination of these two references anticipates the claims but do not explicitly comment in light of the lack of motivation for making the combination asserted by the Examiner.

Applicants thus respectfully submit that the Lorraine and Beffy references are not properly combined because there is no motivation on the face of either of these references for the skilled person to attempt such a combination, and request that the Examiner kindly withdraw this rejection."

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the desire or motivation to improve upon the testing results IS the motivation to combine the references.

Every inventor tries to improve upon the previous inventors work in some manner. Being able to provide a better or more accurate test result is often the reason to pull two testing systems (or parts of two testing systems) into one, <u>especially</u> when one is dealing with measuring and testing, as the test results obtained, and their accuracy, are what defines a great invention over a merely good or average invention. Therefore, a desire to produce the most accurate results possible IS a motivation to combine two inventions into one.

Therefore, the rejections of claims 1, 2, 14, 27, 28, 40, and 41 as being unpatentable over Lorraine et al. in view of Beffy et al. stands and is hereby made final.

10. With regards to claims 2-8, 15-19, 28-34, and 41-45, Applicant continues to argue the following:

"Claims 2-8 depend from claim 1, claims 15-19 and 21 depend from claim 14, claims 28-34 depend from claim 27, and claims 41-45 depend from claim 40. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, in light of the above discussion, Applicants submit that claims 2-8, 15-19, 21, 28-34, and 41-45 are also allowable."

The rejections of claims 2-8, 15-19, 28-34, and 41-45 stand and are made final. Please see the response above for further details.

11. In response to claims 1-9, 14-22, 27-35, and 40-46 being rejected under 34 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,657,732 to Pepper et al. in view of Beffy et al. and U.S. Pat. No. 5,092,336 to Fink, applicant argues the following:

"Claims 1-9, 14-22, 27-35, and 40-46 stand rejected under 34 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,657,732 to Pepper et al. in view of Beffy et al. and U.S. Pat. No. 5,092,336 to Fink. The present Application, Serial No. 10/809,237, and Patent No. 6,657,732 were, at the time the invention of Application Serial No. 10/809,237 was made, owned in their entirety by HRL Laboratories, LLC. U.S. Pat. No. 6,657,732 is therefore disqualified from being used in a 35 U.S.C. 103(a) rejection, and thus Applicant's submit that this rejection is now moot."

Such a statement above would have been sufficient to overcome the above rejection of the recited claims if Applicant had properly presented this statement in accordance with MPEP 7.02(I)(2), section II, EVIDENCE REQUIRED TO ESTABLISH COMMON OWNERSHIP. However, Applicant did not present a "clear and conspicuous" (e.g., on a separate piece of paper or in a separately labeled section)" statement as required. Instead, Applicant placed the statement at the end of the Remarks section where it can be easily overlooked or missed.

A statement provided in a "clear and conspicuous" manner is required to overcome this rejection. Therefore, this rejections stands and is made final until such a time a "clear and conspicuous" statement is received by the office.

#### Conclusion

Page 11

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rose M. Miller whose telephone number is 571-272-2199. The examiner can normally be reached on Monday - Friday, 7:30 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMM

29 November 2005

HEZHON WILLIAMS SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800

in E. Will